

**In the Claims:**

Claims 1-6, 32-34 and 38 were previously pending.

Claims 7-31, 35-37 and 39 were previously canceled without prejudice.

Claims 40-48 have been added.

Claims 1-6, 32-34, 38 and 40-48 are pending.

**Listing of Claims:**

1. (Original) A computer-implemented method facilitating similarity recognition of a digital signal, the method comprising:

obtaining a digital signal; and

deriving a recognition value representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values.

2. (Original) A method as recited in claim 1 further comprising comparing the recognition value with another recognition value derived from another digital signal.

3. (Original) A method as recited in claim 1, wherein the recognition value is a hash value.

4. (Original) A method as recited in claim 1, wherein the digital signals are digital image signals.

5. (Original) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 1.

6. (Original) A computer comprising one or more computer-readable media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 1.

7-31. (Canceled)

32. (Original) A computer-implemented method facilitating similarity recognition of a digital signal, the method comprising:

obtaining a digital signal;

non-linear filtering of the signal to eliminate isolated significant components of the signal;

deriving a recognition value from the filtered signal, the recognition value being representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values.

33. (Original) A method as recited in claim 32, wherein isolated significant components of the signal are those that are geometrically weak.

34. (Original) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 32.

35-37. (Canceled)

38. (Original) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method comprising:

obtaining a digital signal; and

deriving a recognition value representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values.

39. (Canceled)

**New Claims:**

40. (New) A method facilitating similarity recognition of a digital signal, the method comprising:

obtaining a digital signal; and

deriving a recognition value representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values, wherein deriving a recognition value includes:

transforming a digital signal into a digital signal transform;

quantizing the digital signal transform;

geometric-region-growing the digital signal transform;

generating the recognition value of the digital signal.

41. (New) A method as recited in claim 40 further comprising:

pseudorandomly segmenting the digital signal into one or more segments;

for one or more of the segments, repeating the transforming, the quantizing, and the geometric-region-growing, wherein these repeated tasks are performed on a segment rather than the entire signal;

combining one or more of the segments.

42. (New) A method as recited in claim 40 further comprising comparing the recognition value with another recognition value derived from another digital signal.

43. (New) A method as recited in claim 40, wherein the recognition value is a hash value.

44. (New) A method as recited in claim 40, wherein the digital signals are digital image signals.

45. (New) One or more computer-readable media having computer-executable instructions embodied therein, that, when executed by one or more processors, cause the one or more processors to perform acts comprising:

obtaining a digital signal; and

deriving a recognition value representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values, wherein deriving a recognition value comprises:

transforming a digital signal into a digital signal transform;

quantizing the digital signal transform;

geometric-region-growing the digital signal transform;

generating the recognition value of the digital signal.

46. (New) One or more media as recited in claim 45 further comprising computer-executable instructions configured to cause the one or more processors to perform acts comprising:

pseudorandomly segmenting the digital signal into one or more segments;

for one or more of the segments, repeating the transforming, the quantizing, and the geometric-region-growing, wherein these repeated tasks are performed on a segment rather than the entire signal;

combining one or more of the segments.

47. (New) A computer configured to perform acts comprising:

obtaining a digital signal; and

deriving a recognition value representative of the digital signal such that perceptually distinct digital signals result in recognition values that are approximately independent of one another and perceptually similar digital signals result in proximally similar recognition values, wherein deriving a recognition value comprising:

transforming a digital signal into a digital signal transform;

quantizing the digital signal transform;

geometric-region-growing the digital signal transform;

generating the recognition value of the digital signal.

48. (New) A computer as recited in claim 47, the acts further comprising:

pseudorandomly segmenting the digital signal into one or more segments;

for one or more of the segments, repeating the transforming, the quantizing, and the geometric-region-growing, wherein these repeated tasks are performed on a segment rather than the entire signal;

combining one or more of the segments.